

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Preliminary Draft Staff Report for

Proposed Amended Rule 219 - Equipment Not Requiring a Written Permit Pursuant to Regulation II

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EXECUTIVE SUMMARY**PAR 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II**

Rule 219 is an administrative rule that exempts equipment emitting small amounts of air contaminants from District written permit requirements under Regulation II.

Staff proposes to exempt or add to the current exemption of the following equipment that has very small potential for emissions:

- Passive and intermittently operated active venting systems used at and around residential structures to prevent the accumulation of naturally occurring methane and associated gases in enclosed spaces.

Staff proposes to modify languages to:

- Printing and Reproduction Equipment (h)(1);
- Roller to roller coating systems (j)(13);
- Coating and Adhesive Process/Equipment (l)(6) and (l)11);

Staff proposes to require permit for:

- Certain specified equipment, processes or operations that are individually exempt from permits, but may emit 4 tons or more of VOCs or PM₁₀ individually or in aggregate at one facility (s)(3). These are cooling towers; hand applications of materials used in printing operations and coating and adhesive process/equipment; mixers; open spray equipment; and hand application of solvents for cleaning purposes (d)(3), (h)(7), (k)(1), (k)(4), (l)(6), (l)(10), and (o)(4).

BACKGROUND

Rule 219 is an administrative rule that exempts equipment, processes, or operations emitting small amounts of air contaminants from the District's written permit requirements. The rule was first adopted in 1976, and last amended in May and July of 2006.

At the July 14, 2006 Board meeting, in response to a request by RadTech, an association of equipment manufacturers and another manufacturer, staff proposed to study and reconsider exemption levels related to the application of Ultra Violet (UV) and Electron Beam (EB) curable materials. Staff has reviewed the exemption levels applicable to UV/EB and Roller to Roller Coating manufacturing process ads compared with the exemption levels applicable to other ink, adhesive and coating applications and is proposing to harmonize the exemption levels in an equitable manner. In addition, other proposed changes as outlined above are being considered for this amendment to Rule 219.

LEGISLATIVE AUTHORITY

The California Legislature created the AQMD in 1977 (The Lewis-Presley Air Quality Management Act, H&S Code 40400 et seq.) as the agency responsible for developing and enforcing air pollution control rules and regulations in the South Coast Air Basin (Basin). By statute, AQMD is required to adopt an Air Quality Management Plan (AQMP) demonstrating compliance with all state and federal ambient air quality standards for the Basin (H&S Code 40460(a)). Further, AQMD must adopt rules and regulations that carry out the AQMP (H&S Code 40440(a)). Finally, AQMD is authorized to establish a permit system for any equipment that may cause the issuance of air contaminants and to enforce its rules and regulations (H&S Code 42300 et seq.).

PROPOSED AMENDMENTS

Staff proposes to exempt or add to the current exemption of the following equipment that has very small potential for emissions:

1. Passive and intermittently operated active venting systems used at and around residential structures to prevent the accumulation of naturally occurring methane and associated gases in enclosed spaces (c)(10).
 - Underground gases, mainly methane gas, emanating from subsurface geological formations into the atmosphere are natural phenomena in areas of the South Coast Air Basin; particularly in coastal cities and the City of Los Angeles' designated methane zones and buffer zones. These gases, including volatile organic compounds, hydrogen sulfide and other toxic air contaminants, may also be detected in areas near abandoned oil wells which later become developed properties. Local agencies at the city and county levels regulate such collection systems in accordance with building and construction codes where methane gas is or has been known to exist. Typical venting systems consist of a series of slotted pipes placed below the slab and within a backfilled gravel layer, impermeable membranes or other barriers to migration placed directly below the slab, gas detectors and alarms with inter-connected blowers, and vertical stacks. The blowers are activated upon detection of methane in the system or in a confined area, for example in Los Angeles, at 37,500 ppm_v. In the passive or the intermittently active mode, the system provides the methane gas and associated gases with a preferential pathway away from residential structures into the atmosphere. The air quality impacts from passive and intermittently-operated systems are not expected to be significant due to the lesser concentrations of non-methane compounds and the minimal hours of operation. To date, permits have been issued for systems built at some non-

residential structures. This proposed exemption would expand the exemption provided in Rule 219 (c)(5) to larger residential structures such as town homes, condominiums and apartment buildings.

- **Fiscal Impact:** No financial impact on the District because there are currently no permits issued to such equipment.

Staff proposes to amend languages to the following:

1. Printing and reproduction equipment (h)(1)
 - This language is revised to ensure consistent implementation of the exemption to all types of products and technologies which emit small amount of emissions. This amendment will maintain the 6 gallons per day exemption level applicable to UV/EB curable materials but will eliminate the unrestricted usage exemption for UV/EB materials containing fifty (50) grams or less of VOC per liter of material when cleanup solvents containing fifty (50) grams or less of VOC per liter of material are used. UV/EB operations using more than 6 gallons of materials per day can still qualify for an exemption if it can be shown that the corresponding VOC emissions are equal to or less than three (3) pounds per day or 66 pounds per calendar month. This change will result in the equal treatment of all printing and related coating and/or laminating operations regardless of the generic composition (solvent based, waterborne, UV/EB, etc.) of the materials used. This exemption should only be applicable to low emitting equipment and not to equipment using low VOC content material that could result in potentially significant VOC emissions (> 3 pounds per day) due to high throughputs.
 - Changes have also been made to clarify the exemption in order to allow consistent implementation.
 - Fiscal impact: Unknown at this time. However, assuming 3 to 5 additional permits due to this change, facilities could incur additional cost of permit application and processing fees in the amount of \$5,300 (\$1,63.82 per equipment). Additional annual operating fee will be about \$1,200 (\$242.32 per equipment).
2. Roller to roller coating systems (j)(13)
 - The proposed change will allow greater flexibility by allowing coating usages greater than 12 gallons per day provided the VOC emissions are equal to or less than 3 pounds per day or 66 pounds per calendar month. The twelve gallon per day figure was originally determined as being approximately equal to a VOC emission rate of 3 pounds per day for a material that contained 25 grams of VOC per liter.

- Fiscal impact: There is no financial impact on the District because there are currently no permits issued for such equipment. Staff believes that there is only one piece of equipment currently installed and operating.
3. Coating, adhesive application, or laminating equipment (l)(6)
- At the present time, application and laminating equipment operated within control enclosures do not qualify for an exemption under Rule 219(l)(6). This proposed amendment will expand the existing exemption to treat application and laminating equipment operated outside and within control enclosures equally.

This exemption was originally designed to exempt coating and laminating equipment that emitted 3 pounds of VOC per day or less. The usage limitations that are found in subparagraphs (l)(6)(B), (l)(6)(C), (l)(6)(D), and (l)(6)(E) were selected to be approximately equivalent to an emission rate of 3 pounds of VOC per day, which is the exemption level in subparagraph (l)(6)(A). The usage limits in gallons were developed to make it easier for small businesses to determine if they qualified for the exemption. This amendment will eliminate the unrestricted usage exemption for UV/EB materials containing fifty (50) grams or less of VOC per liter of material when cleanup solvents containing twenty-five (25) grams or less of VOC per liter of material are used. UV/EB operations using more than 6 gallons of material per day can still qualify for an exemption if it can be shown that the corresponding VOC emissions are equal to or less than three (3) pounds per day or 66 pounds per calendar month. This change will result in the equal treatment of all coatings regardless of their generic composition (solvent based, waterborne, UV/EB, etc.). This exemption should only be applicable to low emitting equipment and not to equipment using low VOC content materials that could potentially result in significant VOC emissions (> 3 pounds per day) due to high throughputs.

Changes have also been made to clarify the exemption in order to allow consistent implementation.

- Fiscal impact: Unknown at this time. However, assuming 3 to 5 additional permits due to this change, facilities could incur additional cost of permit application and processing fees in the amount of \$5,300 (\$1,63.82 per equipment). Additional annual operating fee will be about \$1,200 (\$242.32 per equipment).
4. Drying equipment or curing ovens associated with coating, adhesive or laminating equipment (l)(11)

- This exemption was originally designed to exempt the flash-off ovens, drying ovens and curing ovens associated with the coating and laminating equipment covered by the exemption in Rule 219(1)(6). In order to ensure consistent implementation of all types of products and technologies which emit small amount of emissions, this amendment will eliminate the unrestricted usage exemption for UV/EB materials containing fifty (50) grams or less of VOC per liter of material when cleanup solvents containing twenty-five (25) grams or less of VOC per liter of material are used. Ovens associated with UV/EB operations using more than 6 gallons of material per day can still qualify for an exemption if it can be shown that the corresponding VOC emissions are equal to or less than three (3) pounds per day or 66 pounds per calendar month. This change will result in the equal treatment of all drying equipment regardless of the generic composition (solvent based, waterborne, UV/EB, etc.) of the materials being processed. This exemption should only be applicable to low emitting equipment and not to equipment using low VOC content materials that could potentially result in significant VOC emissions (> 3 pounds per day) due to high throughputs.
- Changes have also been made to clarify the exemption in order to allow consistent implementation.
- Fiscal impact: Unknown at this time. However, assuming 3 to 5 additional permits due to this change, facilities could incur additional cost of permit application and processing fees in the amount of \$5,300 (\$1,63.82 per equipment). Additional annual operating fee will be about \$1,200 (\$242.32 per equipment).

Staff proposes to require permit for:

Certain specified equipment, processes or operations that are individually exempt from permits, but may emit 4 tons or more of VOCs or PM₁₀ in aggregate when operated at a facility (s)(3).

- Rule 219 currently exempts certain equipment, processes, or operations from a written permit because, individually, they are small sources of emissions. However, at a single facility, these activities in aggregate, though individually exempt, could result in a significant source of emissions. Staff recommends that certain equipment, processes, or operations should now be permitted under a proposed threshold. These sources include: cooling towers; hand applications of materials used in printing operations and coating and adhesive process/equipment; mixers; open spray equipment; and hand application of solvents for cleaning purposes (d)(3), (h)(7), (k)(1), (k)(4), (l)(6), (l)(10), and (o)(4).

Information from enforcement and engineering staff, and the data from the annual emissions reporting, indicate that there are about 95 facilities exceeding 4 tons of VOC or PM₁₀ emissions from exempt equipment (31 for PM₁₀, 64 for VOC). The proposal is for facilities that emit 4 tons or more of VOCs or PM₁₀ in any of the 5 specified exempt categories to require a written permit(s) for any category that individually exceeds 4 tons of VOC or PM₁₀ emissions.

- Fiscal impact: Staff estimates about 95 facilities that will be subject to written permits for any of the specified categories of the exempted equipment, processes or operations. The permit processing fee will be assessed as schedule A (\$1063.82) per Rule 301(c)(1)(I) and annual operating fee will be \$242.32 per Rule 301(d)(2).

In addition, there will be an annual emissions fee based on total emissions of each of the VOC, and PM₁₀ (\$427.34 per ton of VOC and \$326.79 per ton of PM₁₀ for 4-25 tons of total emissions per year). This fee is in addition to a flat fee (\$90.08) for 0-<4 tons/year charged to all facilities (requiring at least one District permit). It is estimated that 64 facilities will exceed 4 tons of VOC and the other 31 will exceed 4 tons of PM₁₀. Revenue may range between \$150,000 and \$370,000 (Assuming a range of 4 tons of VOC/PM₁₀ and 10 tons of VOC/PM₁₀).

CALIFORNIA HEALTH AND SAFETY CODE SECTION 40727.2

ANALYSIS (COMPARATIVE ANALYSIS)

Health and Safety Code Section 40727.2 requires a comparison of the proposed amended rule with existing regulations imposed on the same equipment. There are no federal air pollution regulations that affect these types of operations.

INCREMENTAL COST EFFECTIVENESS

Health and Safety Code Section 40920.6 requires an incremental cost-effectiveness analysis of potential control options for rules which would achieve the emission reduction objective relative to Ozone, CO, SO_x, NO_x, and their precursors. The proposed amendments to Rule 219 are administrative in nature and do not result in emission reductions. Therefore, the incremental cost-effectiveness analysis is not required.

CALIFORNIA ENVIRONMENTAL AIR QUALITY ACT ANALYSIS

Pursuant to the California Environmental Quality Act (CEQA) and AQMD Rule 110, the AQMD will prepare appropriate CEQA documentation for the proposed amendments to Rule 219. Upon completion, the CEQA documentation will be released for public review and comment, and will be available at AQMD

Headquarters, by calling the AQMD Public Information Center at (909) 396-3600, or by accessing AQMD's CEQA website at: www.aqmd.gov/ceqa.

SOCIOECONOMIC ASSESSMENT

A socioeconomic analysis of the proposed amendments will be prepared and made available 30 days prior to the board hearing.

DRAFT FINDINGS

Before adopting, amending, or repealing a rule, the California Health and Safety Code (H&SC) requires AQMD to adopt written findings of necessity, authority, clarity, consistency, non-duplication, and reference, as defined in H&SC section 40727. The findings are as follows:

Necessity - The AQMD Governing Board has determined that a need exists to: amend Rule 219 - Equipment Not Requiring a Written Permit Pursuant to Regulation II, to exempt from written permits certain equipment that has been evaluated and found to emit small amounts of air contaminants and to include new and clarified rule language for various types of equipment.

Authority - The AQMD Governing Board obtains its authority to adopt, amend, or repeal rules and regulations from H&S Code Sections 40000, 40001, 40440, 40463, 40702, 40725 through 40728, 42300 et seq.

Clarity - The AQMD Governing Board has determined that PAR 219 - Equipment Not Requiring a Written Permit Pursuant to Regulation II is written and displayed so that the meaning can be easily understood by persons directly affected by the rule.

Consistency - The AQMD Governing Board has determined that PAR 219 - Equipment Not Requiring a Written Permit Pursuant to Regulation II is in harmony with, and not in conflict with, or contradictory to, existing statutes, court decisions, federal or state regulations.

Non-Duplication - The AQMD Governing Board has determined that the proposed amendments to Rules 219 - Equipment Not Requiring a Written Permit Pursuant to Regulation II does not impose the same requirement as any existing state or federal regulation, and the proposed amended rule is necessary and proper to execute the powers and duties granted to, and imposed upon AQMD.

Reference - In adopting these regulations, the AQMD Governing Board references the following statutes which AQMD hereby implements, interprets or makes specific: H&S Code Sections 40001 (rules to achieve ambient air quality standards), 40506 (rules regarding the issuance of permits), 40701 (rules regarding district's authority to collect information), 42300 et seq. (authority for permit system), and 42320 (rules implementing the Air Pollution Permit Streamlining Act of 1992).

CONCLUSION

Rule 219 is an administrative rule that is amended frequently to add, delete or clarify language regarding equipment that is exempt from District permitting requirements. This amendment attempts to further refine and clarify the rule language and to require new permits. Also, the amendment proposes to exempt certain equipment with low emission potential and not to exempt equipment that might exceed toxic risk limits.